

REMARKS

This Amendment is fully responsive to the non-final Office Action dated July 12, 2009, issued in connection with the above identified application. Claims 1-60 are pending in the present application. With this Amendment, claims 1, 2, 4, 7, 9, 26, 29-31, 34, 37, 39, 55, 59 and 60 have been amended; and claims 3, 10-25, 27, 28, 33, 40-54, 57 and 58 have been cancelled without prejudice or disclaimer to the subject matter therein. Favorable reconsideration is respectfully requested.

The Applicants have amended the specification and the abstract. The amendments to the specification and the abstract are editorial in nature. Replacement portions of the specification and a replacement abstract are included. No new matter has been introduced by the amendments made to the specification and the abstract.

In the Office Action, the Examiner indicates that claims 6 and 36 avoid the prior art (see page 12 of Office Action), which is interpreted by the Applicants to mean that claims 6 and 36 include allowable subject matter. Claims 6 and 36 have not been amended by this Amendment. Therefore, claims 6 and 36 are still believed to be distinguished from the cited prior. Additionally, the arguments and amendments provided herein are believed to be sufficient to overcome the rejection to the base claims from which claims 6 and 36 respectively depend.

In the Office Action, the Examiner objects to the title as being non-descriptive of the invention, as claimed. The Applicants have amended the title so as to be more descriptive of the present invention. In particular, the Applicants have amended the title to read as follows:

“AUDIO AND VIDEO RECORDING AND REPRODUCING APPARATUS AND METHOD FOR RECORDING AND REPRODUCING MAIN INFORMATION WITH AUDIO ADDITIONAL INFORMATION.”

Withdrawal of the objection to the title is respectfully requested.

In the Office Action, claims 1-60 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner alleges that the limitation “added to the main information” recited in the claim 31 is indefinite. The Examiner also alleges that a similar issue is present in independent claim 1.

The Applicants have amended claims 1 and 31 to clarify that “the audio additional information is added to the main information.” This feature of the present invention is supported

by at least Fig. 1 of the Applicants' disclosure. Withdrawal of the rejection to claims 1-60 under 35 U.S.C. 112, second paragraph, is respectfully requested.

In the Office Action, claim 1, 2-5, 7-29, 31-35, 37-53 and 55-60 have been rejected under 35 U.S.C. 103(a) as being unpatentable over King (U.S. Patent No. 5,600,775, hereafter "King") in view of Purnaveja (U.S. Patent No. 6,230,172, hereafter "Purnaveja").

Claims 3, 10-25, 27, 28, 33, 40-53, 57 and 58 have been cancelled thereby rendering the above rejection to those claims moot. Additionally, the Applicants have amended independent claims 1 and 31 to more clearly distinguish the present invention from the cited prior art.

Independent claim 1 (as amended) recites *inter alia* the following features:

"[a] recording and reproducing apparatus for audio and video comprising:...

a controller configured to control the operation of the AV input section, the audio additional information input section, the AV output section, and the recording and reproducing section,

wherein the controller controls the AV input section, the audio additional information input section, the AV output section, and the recording and reproducing section so that the audio additional information is recorded to the recording medium, relating the audio additional information to a specific frame position in the main information and out of synchronization with a time axis of the main information, and

wherein audio data of the main information is recorded in MXF format and the audio additional information is recorded in WAVE format which is a different from the format of audio data of the main information." (Emphasis added).

The features emphasized above in independent claim 1 are similarly recited in independent claim 31. That is, independent claim 31 is a method that includes steps directed to the features of the apparatus of independent claim 1. Additionally, the features noted above in independent claim 1 (and similarly recited in independent claim 31) are fully supported by the Applicants' disclosure (e.g., pg. 19, lines 2-13; pg. 34, lines 4-20; Fig. 1; and Fig. 7).

The present invention (as recited respectively in independent claims 1 and 31) is distinguishable from the cited prior art in that a recording and reproducing apparatus or method controls an AV input section, an audio additional information input section, an AV output section, and a recording and reproducing section so that audio additional information is recorded to a recording medium, relating the audio additional information to a specific frame position in

the main information and out of synchronization with a time axis of the main information. Additionally, the audio data of the main information is recorded in MXF format and the audio additional information is recorded in WAVE format which is a different from the format of audio data of the main information.

In the present invention (as recited in independent claims 1 and 31), the audio additional information is, for example, voice memo data showing what the main information is, and thus it is not necessary to be reproduced in strict synchronization with the main information. Therefore, even when the audio additional information is reproduced out of synchronization with the main information, control operations are much easier.

Additionally, since the audio additional information is related to a specific point on a time axis of main information, by recording the audio additional information out of synchronization with the main information, the audio additional information can be recorded for a longer time than the duration of a related clip. For example, for a clip of several seconds, a voice memo (i.e., audio additional information) can be recorded for tens of seconds. Additionally, a voice memo (i.e., audio additional information) can be recorded in various states of the main information such as during stop, reproduction or trick play (e.g., fast search reproduction, reverse reproduction).

Additionally, in the present invention (as recited in independent claims 1 and 31) the main information is recorded in MXF format, which is suitable for editing the audio data of the main information; and the audio additional information (e.g., voice memo) is recorded in WAVE format, which is suitable for handling in a general personal computer (PC). Since audio data of main information is to be edited, it is easy to edit using MXF format. Therefore, the editing efficiency is enhanced.

In the Office Action, the Examiner relies on the combination of King and Purnaveja for disclosing or suggesting all the features recited in independent claims 1 and 31. However, the Applicants assert that the combination of King and Purnaveja fails to disclose or suggest all the features recited in independent claims 1 and 31, as amended.

As noted above, independent claim 1 has been amended to recite the following:

“wherein the controller controls ...so that the audio additional information is recorded to the recording medium, relating the audio additional information to a specific frame position in the main information and out of synchronization with a time axis of the main information, and

wherein audio data of the main information is recorded in MXF format and the audio additional information is recorded in WAVE format which is a different from the format of audio data of the main information.”

As noted above, these features of independent claim 1 are similarly recited in independent claim 31.

In the Office Action, the Examiner relies on King in col. 6, lines 30-50 for disclosing the recording of additional audio-based annotation information. King in col. 6, lines 30-50 discloses a multimedia content that may be stored as a file of digital video frames. Additionally, this file may include a number of indexed data structures 101, 102, 103, 104, 105. Additionally, a number of annotation data structures are also stored in the system. For instance, a voice structure 201 is stored as an annotation data structure.

However, nothing in col. 6, lines 30-50 of King discloses that the data structures or annotation structures are recorded to the recording medium, relating the audio additional information to a specific frame position in the main information and out of synchronization with a time axis of the main information, as recited in independent claims 1 and 31 (as amended).

In the Office Action, the Examiner also relies on Purnaveja at col. 2, lines 59-66 and col. 7, lines 40-51 for disclosing or suggesting the recording of main information and additional information.

Purnaveja at col. 2, lines 59-66 merely discloses that it would be desirable to provide a multimedia stream such as a video and audio stream, together with annotations such as textual and graphical information in an integrated seamless package to a client computer.

Additionally, Purnaveja at col. 7, lines 40-51 discloses a locator annotation stream 800a that includes an annotation stream header 810a, and a plurality of annotation frames 820a, 830a, 840a,... 890a. As described in Purnaveja, each annotation frame includes an event locator and an event time marker.

Similar to King, Purnaveja (in col. 2, lines 59-66 and col. 7, lines 40-51) fails to disclose or suggest relating annotations to a specific frame position in main information and out of synchronization with a time axis of the main information, as recited in independent claims 1 and 31 (as amended).

Additionally, neither King nor Purnaveja disclose or suggest that audio data of the main information is recorded in MXF format and the audio additional information is recorded in

WAVE format which is a different from the format of audio data of the main information, as also recited in independent claims 1 and 31 (as amended).

Based on the above discussion, no combination of King and Purnaveja would result in, or otherwise render obvious, independent claims 1 and 31 (as amended). Likewise, no combination of King and Purnaveja would result in, or otherwise render obvious, claims 1, 2, 4, 5, 7-9, 26, 29, 31, 32, 34, 35, 37-39, 55, 56, 59 and 60 at least by virtue of their respective dependencies from independent claims 1 and 31.

Additionally, the Applicants assert that at least claims 55 and 60 are distinguishable from the cited prior art on their merit.

With regard to dependent claim 55, the claim recites the following:

*“displaying thumbnail images of main information; and
when one or more pieces of audio additional information is related to the same main
information, displaying respective thumbnail images of main information at frame positions
each related to each piece of the audio additional information so as to select a thumbnail
image.”*

With regard to dependent claim 60, the claim recites the following:

*“reproducing the audio additional information out of synchronization with a time axis of
the main information.”*

The above features of dependent claims 55 and 60 are not believed to be disclosed or suggested by the cited prior art. Accordingly, dependent claims 55 and 60 are distinguished from the cited prior art on their own merit.

In the Office Action, claims 30 and 54 have been rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Purnaveja, and further in view of Horoszowski et al. (U.S. Publication No. 2004/0216173, hereafter “Horoszowski”).

Claim 54 has been cancelled thereby rendering the above rejection to that claim moot. Additionally, claim 30 depends from independent claim 1. As noted above, King and Purnaveja fail to disclose or suggest all the features recited in independent claim 1 (as amended). Moreover, Horoszowski fails to overcome the deficiencies noted above in King and Purnaveja. Accordingly, no combination of King, Purnaveja and Horoszowski would result in, or otherwise render obvious, claim 30 at least by virtue of its dependency from independent claim 1.

In light of the above, Applicants submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue.

Respectfully submitted,

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